

**What is claimed is:**

1. An image reproducing device for reproducing image data and outputting the reproduced image data to a display device, the image reproducing device comprising:

5 an input unit operable to obtain the image data, and image information including position information relating to either or both of a shooting position from which the image is shot and an object position included in the image data;

10 a map display unit operable to display a map on the display device; and

a position display unit operable to display a symbol indicating the image data on a position corresponding to either the shooting position or the object position on the map, based on the position information included in the image information.

15 2. The image reproducing device according to Claim 1, further comprising:

an image information analysis unit operable to analyze the obtained image information; and

20 a symbol attribute change unit operable to change at least one attribute of the symbol based on the analysis result obtained by the image information analysis unit;

25 wherein the position display unit displays the symbol according to at least one attribute changed by the symbol attribute change unit.

3. The image reproducing device according to Claim 2,

30 wherein the image information analysis unit analyzes the position information included in the obtained image information and counts one of the following: the number of image shot from the same position; and the number of image including an object in the same position, and

the symbol attribute change unit changes at least one attribute of the symbol based on the counting result obtained by the image information analysis unit.

5     4.     The image reproducing device according to Claim 2,  
         wherein the image information includes information on a  
         length of time for shooting the image data,  
         the image information analysis unit analyzes the length of  
         shooting time for each image data, and  
10           the symbol attribute change unit changes the symbol based  
         on the length of shooting time.

5.     The image reproducing device according to Claim 2, further  
comprising:

15           a reproduction information measurement unit operable to  
         measure at least one of the following: the number of times  
         reproducing the image data and a length of time taken for  
         reproducing the image data; and

         a reproduction information retention unit operable to add up  
20 each measurement result obtained by the reproduction information  
         measurement unit and retain the obtained addition result,

         wherein the symbol attribute change unit changes at least  
one attribute of the symbol based on the addition result retained by  
the reproduction information retention unit.

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6.     The image reproducing device according to Claim 2,  
         wherein the symbol attribute change unit changes at least  
one of the followings as an attribute of the symbol: size, color,  
brightness and form.

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7.     The image reproducing device according to Claim 2, further  
comprising a display method selection unit operable to receive

standard settings for changing at least one of the attributes of the symbol, wherein the symbol attribute change unit changes at least one of the attributes of the symbol according to the standard settings.

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8. An image recording/reproducing device, which includes a camera for shooting an object and generating image data, for reproducing the generated image data and outputting the reproduced image data to a display device, the image recording/reproducing device comprising:

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a camera position/direction detection unit operable to detect a camera position and a camera direction;

an object distance detection unit operable to detect a distance between the camera and the object based on a focal length of the camera;

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an object position calculation unit operable to calculate a position of the object based on the detected camera position and camera direction, and the detected distance to the object;

an object search unit operable to search for a plurality of objects within a predetermined spatial range having the calculated object position in the center;

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a candidate object selection unit operable to select a single object from among the plurality of objects, when a plurality of objects are found as a result of the search conducted by the object search unit;

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a shooting unit operable to shoot the selected object and generate image data;

a storage unit operable to store the generated image data and image information including position information relating to either or both of one of the camera position and the object position;

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a map display unit operable to display a map on the display device; and

a position display unit operable to display a symbol indicating the image data on a position corresponding to either the camera position or the object position on the map.

5 9. The image recording/reproducing device according to Claim 8, further comprising: a camera position correction unit operable to correct the camera position detected by the camera position/direction detection unit using the position of the selected object.

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10. The image recording/reproducing device according to Claim 9,

wherein the storage unit stores image information including at least one of the followings: the camera position after the  
15 correction made by the camera position correction unit, and the object position.

11. The image recording/reproducing device according to Claim 8, further comprising a camera parameter setting unit operable to  
20 calculate at least one camera parameter optimal for shooting the object using the position of the selected object and the camera position,

wherein the shooting unit shoots the selected object according to the calculated camera parameter.

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12. The image recording/reproducing device according to Claim 8, further comprising: a range input unit operable to receive an input of the predetermined spatial range;

wherein the object search unit searches for a plurality of  
30 objects within the inputted range.

13. The image recording/reproducing device according to Claim 8,

further comprising a range calculation unit operable to calculate the predetermined spatial range based on the detected camera position and camera direction, and the focal length of the camera,

wherein the object search unit searches for a plurality of  
5 objects within the calculated range.

14. The image recording/reproducing device according to Claim 8,  
further comprising a planned shooting location input unit operable  
to receive an input of a planned shooting location that is a site where  
10 a shooting is planned by a user,

wherein the position display unit displays a symbol indicating  
the inputted planned shooting location in a position corresponding  
to the planned shooting location on the map.

15. An image reproduction method for reproducing image data  
and outputting the reproduced image data to a display device, the  
method comprising:

an input step of obtaining the image data, and image  
information including position information relating to at least one of  
20 a shooting position from which the image data is shot and an object  
position included in the image data;

a map display step of having the display device display a map;

a position display step of displaying a symbol indicating the  
image data in a position corresponding to either the shooting  
25 position or the object position on the map, based on the position  
information included in the image information;

an image selection step of receiving a selection of the symbol  
displayed in the position display step; and

an image reproduction step of reproducing image data  
30 corresponding to the selected symbol.

16. The image reproduction method according to Claim 15,

further comprising:

an image information analysis step of analyzing the obtained image information; and

5 a symbol attribute change step of changing at least one attribute of the symbol based on the analysis result obtained in the image information analysis step;

wherein in the position display step, the symbol is displayed according to at least one attribute changed in the symbol attribute change step.

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17. An image recording/reproduction method for shooting an object with a camera, generating image data, reproducing the generated image data and outputting the reproduced image data to a display device, the method comprising:

15 a camera position/direction detection step of detecting a camera position and a camera direction;

an object distance detection step of detecting a distance between the camera and the object based on a focal length of the camera;

20 an object position calculation step of calculating a position of the object using the detected camera position and camera direction, and the detected distance to the object;

an object search step of searching for a plurality of objects within a predetermined spatial range having the calculated object position in the center;

25 a candidate object selection step of selecting a single object from among the plurality of objects, when a plurality of objects are found as a result of the search conducted in the object search step;

30 a shooting step of shooting the selected object and generating image data;

a storage step of storing the generated image data and image information including position information relating to at least one of

the camera position and the object position;

a map display step of displaying a map on the display device;

a position display step of displaying a symbol indicating the image data in a position corresponding to either the camera position or the object position on the map, based on the position information included in the image information;

an image selection step of receiving a selection of the symbol displayed in the position display step; and

an image reproduction step of reproducing image data corresponding to the selected symbol.

18. A program for an image reproducing device which reproduces image data and output the reproduced image data to a display device, the program causing a computer to execute the following steps:

an input step of obtaining the image data and image information including position information relating to at least one of a shooting position from which the image data is shot and an object position included in the image data;

a drawing display step of displaying a map on the display device;

a position display step of displaying a symbol indicating the image data in a position corresponding to either the shooting position or the object position on the map, based on the position information included in the image information;

an image selection step of receiving a selection of the symbol displayed in the position display step; and

an image reproduction step of reproducing image data corresponding to the selected symbol.

19. A program for an image recording/reproducing device which includes a camera for shooting an object, generates image data,

reproduces the generated image data and outputs the reproduced image data to a display device, the program causing a computer to execute the following steps:

5       a camera position/direction detection step of detecting a camera position and a camera direction;

          an object distance detection step of detecting a distance between the camera and the object based on a focal length of the camera;

10       an object position calculation step of calculating a position of the object using the detected camera position and camera direction, and the detected distance to the object;

          an object search step of searching for a plurality of objects within a predetermined spatial having the calculated object position in the center;

15       a candidate object selection step of selecting a single object from among the plurality of objects when a plurality of objects are found as a result of the search conducted in the object search step;

          a shooting step of shooting the selected object and generating image data;

20       a storage step of storing the generated image data and image information including position information relating to at least one of the camera position and the object position;

          a map display step of displaying a map on the display device;

25       a position display step of displaying a symbol indicating the image data in a position corresponding to either the camera position or the object position on the map, based on the position information included in the image information;

          an image selection step of receiving a selection of the symbol displayed in the position display step; and

30       an image reproduction step of reproducing image data corresponding to the selected symbol.